

METHOD AND APPARATUS FOR INTERPOLATING PIXEL PARAMETERS BASED ON A PLURALITY OF VERTEX VALUES

ABSTRACT

A method and apparatus for interpolating pixel parameters based on the plurality of vertex values includes operating first and a setup mode and a calculation mode. The method and apparatus includes, while in a setup mode, generating a plurality of differential geometric values based on the plurality of vertex values, wherein the differential geometric values are independent of a parameter slope between the plurality of vertex values. While in a calculation mode, a first geometric value and second geometric value are determined based on a pixel value, a plurality of vertex values and the differential geometric values. A pixel value is determined for each of the plurality of pixels based on the vertex parameter value, the first geometric value and the second geometric value. Thereupon, pixel parameters may be interpolated on a per-pixel basis reusing the differential geometric values.